

- c—Cephalic horns.
- d—Anterior spiracle of larva and pupa.
- e—Antero-dorsal spiracles of pupa. Lateral view.
- f—Posterior spiracle. Right half drawn.

Fig. 3—*Chrysotoxum pubescens* Loew.

Pupa, lateral view.

k—Posterior end. Dorsal view.

l—Posterior spiracle. Right half drawn.

Fig. 4—*Brachypalpus rileyi* Williston.

Pupa dorsal view.

g—Anterior spiracle of larva and pupa.

h—Cephalic horns.

i—Antero-dorsal spiracles of pupa. Lateral view.

j—Posterior spiracle. Right half drawn.

Plate 7.

Fig. 1—*Xylota bicolor* Loew.

Pupa, dorsal view.

a—Cephalic horns.

b—Anterior spiracle of larva and pupa.

c—Antero-dorsal spiracle of pupa. Lateral view.

d—Posterior spiracle. Right half drawn.

Fig. 2—*Criorhina pictipes* Bigot.

Pupa, dorsal view.

e—Anterior spiracles of larva and pupa.

f—Antero-dorsal spiracles of pupa. Lateral view.

g—Posterior spiracles.

Fig. 3—*Myiolepta nigra* Loew.

Pupa, dorsal view.

k—Posterior spiracles.

Fig. 4—*Blera (Criorhina) umbratilis* Williston.

Pupa, dorsal view.

h—Anterior-spiracles of larva and pupa.

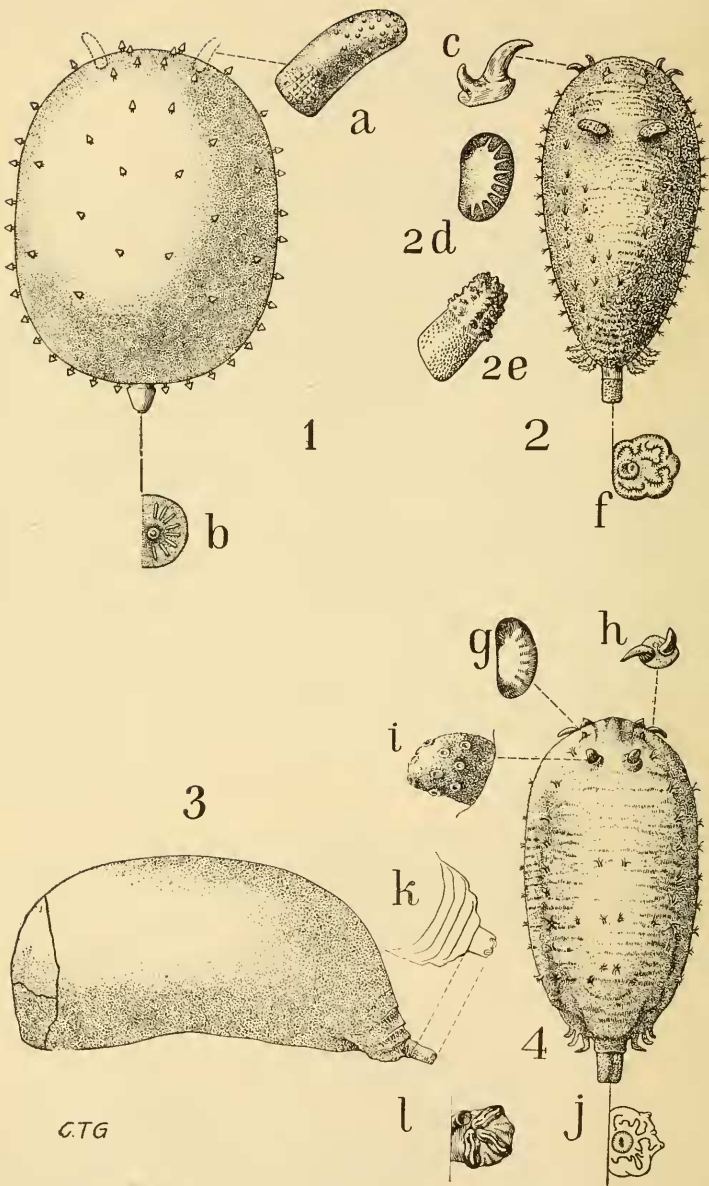
i—Antero-dorsal spiracles of pupa.

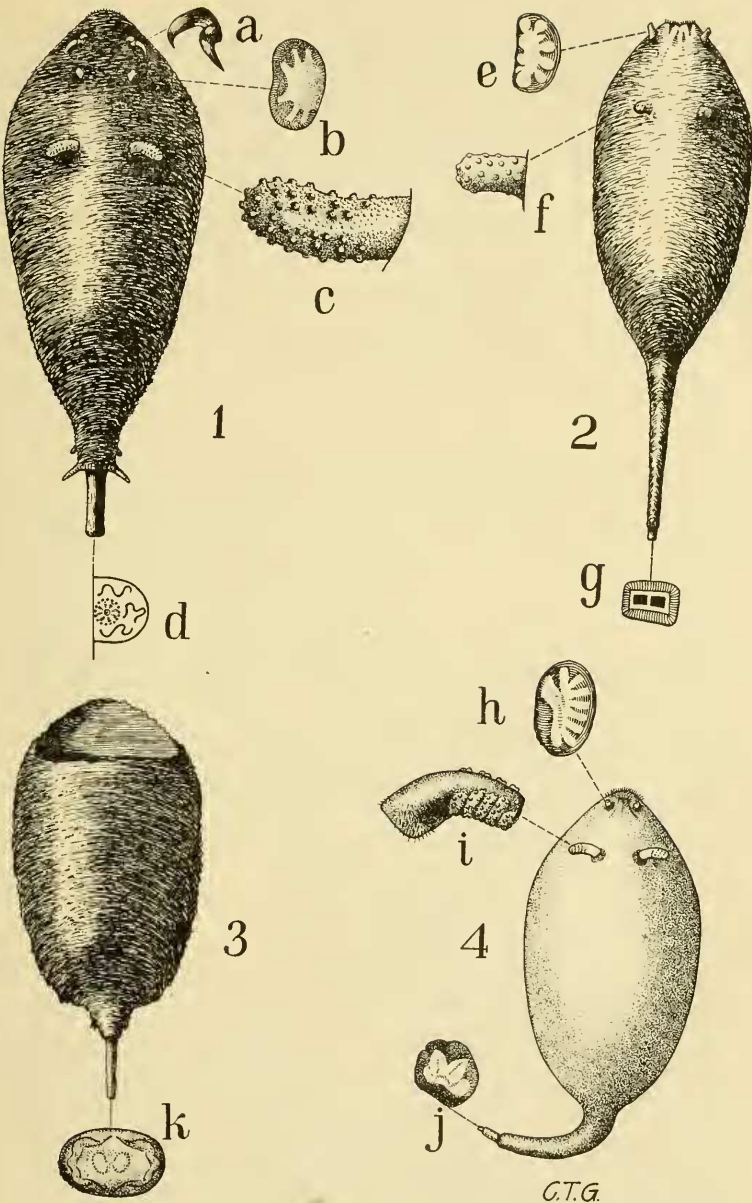
j—Posterior spiracles. Left half drawn.

A NEW GLYPTOTERMES FROM PORTO RICO.

BY THOS. E. SNYDER, *U. S. Bureau of Entomology.*

Only eight species of the genus *Glyptotermes* are known from America, although its contained species are widely distributed throughout the world. Two species are known from the Antilles, namely, *G. pubescens* Snyder and this new species *G. corniceps* Snyder—both from Porto Rico.





GREENE—BIOLOGY OF N. A. DIPTERA.

In habits they are similar to species of *Cryptotermes* Banks, living in dry, hard, solid wood. These termites might easily be imported through commerce (in furniture, etc.) and might prove very destructive. They probably could survive in the Southern States. Their presence in wood may be detected by small round holes and small impressed pellets of excreta which drop from the wood.

***Glyptotermes corniceps*, new species.**

Deülated adult.—Head yellow-brown (light castaneous-brown) lighter towards posterior margin, where rounded, slightly longer than broad, on anterior slope, V-shaped, white markings originating from a fairly large, oblong frontal gland depression, which has its base on a line with the center of the ocelli; with scattered, long hairs.

Labrum yellow-brown, broader than long, broadly rounded at apex, with long hairs.

Eyes black, not round, large, close to lateral margin of head. Ocelli large, oblong, placed obliquely but close to compound eyes.

Antennae light yellow-brown, 9 segments (broken), pubescent; third segment slightly darker colored, subclavate, longer than second or fourth segments; fourth to seventh small, ring-like to wedge-shaped; from seventh on, segments longer and broader.

Palpi light yellow-brown, terminal segments conical, middle segments broad, pubescent.

Pronotum light yellow-brown, darker on margins, margins emarginate—only slightly anteriorly, not twice as broad as long, sides nearly parallel, rounded near posterior, with long hairs.

Legs with femora white and swollen, tibiae and tarsi yellow-brown, slender, pubescent.

Abdomen light yellow-brown, densely pubescent—hairs fairly long.

Measurements:

Length of entire deülated adult: 4.70–5.00 mm.

Length of head (to tip labrum): 1.30 mm.

Length of pronotum: 0.80 mm.

Length of wing scale: 0.90 mm.

Length of hind tibia: 0.95–1.00 mm.

Diameter of eye (long diam.): 0.31 mm.

Width of head: 1.10 mm.

Width of pronotum: 1.10 mm.

Soldier.—(Plate 8, figs. 1–3). Head light yellow-brown, darker (light castaneous-brown) anteriorly, slightly concave in profile and with sides slightly convex, rounded posteriorly; depression at anterior slope (epicranial suture) which is outlined by a slightly raised rim; one short, slender, castaneous-brown knob or forward-pointing lateral process between antennal socket and maxillary palpus; faint oblong eye spot parallel to rim of antennal socket; head with scattered, fairly long hairs.

Labrum light yellow-brown, broader than long; broadly rounded at apex where there are long hairs.

Gula fairly broad, width at middle more than half the width at front.

Mandibles reddish-brown to piceous—lighter colored near base; elongate, fairly straight, incurved at tips, slightly curved upwards; marginal teeth prominent near tip of left mandible.

Antennae light yellow-brown, 11-12 segments, pubescent; third segment subclavate, slightly longer than second or fourth; from fifth segment on segments longer and broader; last segment short and suboval.

Maxillary palpi with the terminal segment slender, elongate (longer and more slender than the two adjacent segments), with apex obliquely truncate, pubescent.

Pronotum white with tinge of yellow, darker colored at anterior margin, where deeply but roundly emarginate, somewhat semicircular, posteriorly emarginate.

Legs with femora white and slightly swollen, tibiae and tarsi yellowish and slender, pubescent.

Abdomen dirty white with tinge of yellow, with dense, fairly long hairs.

Measurements:

Length of entire soldier: 3.7-3.8 mm.

Length of head with mandibles: 2.20-2.45 mm.

Length of head without mandibles (to anterior): 1.45-1.50 mm.

Length of left mandible: 1.00 mm.

Length of pronotum: 0.50-0.65 mm.

Length of hind tibia: 0.70-0.75 mm.

Width of head: 1.05-1.15 mm.

Width of pronotum: 0.9-1.05 mm.

The specific name is based on the processes on the front of the head of the soldier.

Type locality.—Boqueron-Salinas, Porto Rico.

Described from two deälated (♂ and ♀) adults and two soldiers, collected together with workers at the type locality on February 21, 1923, by G. N. Wolcott, Acc. No. 81-23.

Type, male deälated adult.—Cat. No. 26199, U. S. N. M.

Biological Note.

The manner of working in dry hard wood is similar to that of *Glyptotermes pubescens* Snyder of Porto Rico. Similar impressed pellets are expelled from tunnels in the infested wood—in this case a dead tree branch. The locality where collected is one of the driest sections of the island and about one mile away salt was being made by open-air evaporation of the sea-water.

Explanation of Plate.

Plate 8. *Glyptotermes corniceps* Snyder. Soldier.

Fig. 1. View of mandibles, dorsal.

Fig. 2. Three-quarters view of head and pronotum.

Fig. 3. Dorsal view of head and pronotum (outline), note anterior knobs.